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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/519,013

12/21/2004

Alberto Lodolo

KAR 007

7643

39232 7590 10/15/2008
Themis Intellectual Property Counsel
7660 Fay Ave Ste H535
La Jolla, CA 92037

EXAMINER

JACYNA, J CASIMER

ART UNIT

PAPER NUMBER

3754

MAIL DATE

DELIVERY MODE

10/15/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/519,013	Applicant(s) LODOLO, ALBERTO	
	Examiner J. Casimer Jacyna	Art Unit 3754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,6,7,9-33,40 and 41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,6,7,9-24,26-33,40 and 41 is/are allowed.
- 6) ☒ Claim(s) 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 September 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The indicated allowability of claim 25 is withdrawn in view of the newly discovered reference(s) to Loepsinger and Weingarten. Rejections based on the newly cited reference(s) follow.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Loepsinger 2,936,998 in view of Weingarten 45,383,646 and Frenkel 6,095,484. Loepsinger discloses a diaphragm valve including circular entry ports 16, 18, converging arched profiles leading to a flat valve seat as shown at the top of weir 20 in figure 1, a fluid flow chamber 22, a body clamping flange 26, a bonnet 32, a bonnet clamping flange 34, a flattened central valve seat shown at the top of weir 20 in figure 1 and as seen in figures 1 and 5, the valve seat extends underneath rib 68 and will have a long axis between numerals 70 in figure 5 and a short axis about equal to the width of 44 in figure 5 thus giving the valve seat a substantially elliptical curvature at the flattened central surface as claimed, an elastomeric diaphragm 38 with a sealing flange 40, a concave convex dome shown above 38, 46 in figure 1 and above 30 in figure 2 with the concave side oriented toward the valve seat in the unstressed position as shown in figures 1 and 2, whereby the inlets to the flow chamber will have a long axis equal to the length of a side of 68 in figure 5 and a slightly shorter axis extending from the edge of the flat valve seat in figure 1 to the areas adjacent 24 and 26 in figure 1 thus

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giving the flow chamber inlets a semi-elliptical shape in cross section as claimed which converge over the valve seat, with the sealing flange having an elongated shape with an elliptical edge and having the dome extend from the edge like a sector of an ellipsoid as shown at 32 in figure 5, and a concave pressure element 41 substantially as claimed but does not disclose a spring nor a plurality of ribs on the diaphragm parallel to the short axis of the ellipse. However, Weingarten teaches another diaphragm valve having a spring 28 for the purpose of allowing the valve to be automatically actuated through the pneumatic inlets at 30. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the valve of Loepsinger with a spring as, for example, taught by Weingarten in order to allow the valve to be automatically actuated. In regard to the ribs, Frenkel teaches another diaphragm valve having ribs 5, 7 on the diaphragm that extend directly above and in contact with the valve seat on the top of the weir which, in Loepsinger, is parallel to the short axis of the dome, for the purpose of ensuring hermetic sealing between the diaphragm and the valve seat. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the diaphragm valve of Loepsinger with ribs on the diaphragm as, for example, taught by Frenkel in order to ensure hermetic sealing between the diaphragm and the valve seat.

4. Claims 1, 2, 6, 7, 9-24, 26-33, 40 and 41 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Casimer Jacyna whose telephone number is 571-272-4889. The examiner can normally be reached on Mon. thru Fri. 9AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 571-272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. Casimer Jacyna/
Primary Examiner, Art Unit 3754